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15-F-0177

October 9, 2014

VIA CERTIFIED MAIL

Office of Freedom of Information
Defense Advanced Research Projects Agency (DARPA)
1155 Defense Pentagon
Washington, DC 20301-1155

Re: DARPA Robust Automatic Transcription of Speech Program

Dear FOIA Officer:

This letter constitutes a request under the Freedom of Information Act ("FOIA"), 5 U.S.C. § 552, and is submitted on behalf of the Electronic Privacy Information Center ("EPIC").

EPIC seeks documents concerning the development of DARPA's Robust Automatic Transcription of Speech (RATS) Program.

Background

The Defense Advanced Research Facility The Defense Advanced Research Projects Agency (DARPA) is a component of the Department of Defense that was established in 1958. The Agency conducts basic research and creates technologies that address practical problems through applied research.[1]

DARPA has publicly announced many of its programs on its website, including the Robust Automatic Transcription of Speech (RATS) Program. The RATS program is a speech recognition and analysis program currently under development by the agency.

DARPA website states "Existing speech signal processing technologies are inadequate for most noisy or degraded speech signals that are important to military intelligence. The Robust Automatic Transcription of Speech (RATS) program will create algorithms and software for performing the following tasks on potentially speech-

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[1] DARPA, Our Work, http://www.darpa.mil/our_work/

containing signals received over communication channels that are extremely noisy and/or highly distorted."[2]

The RATS program has four goals:

- o Speech Activity Detection: Determine whether a signal includes speech or is just background noise or music.
- o Language Identification: Once a speech signal has been detected, identify the language being spoken.
- o Speaker Identification: Once a speech signal has been detected, identify whether the speaker is an individual on a list of known speakers.
- o Key Word Spotting: Once a speech signal has been detected and the language has been identified, spot specific words or phrases from a list of terms of interest.[3]

A July 14, 2011 press release by SRI International, a "nonprofit, independent research and innovation center serving government and industry," announced that DARPA had awarded a contract to SRI International to develop robust speech processing software for noisy environments.[4] According to the SRI International's press release

For this project, SRI's Speech Technology and Research (STAR) Laboratory will develop speech processing algorithms and software to detect speech activity, identify the speaker and the language being spoken (from a predefined set of speakers and languages), and search for key words. The goal of the program is to extract information from highly distorted audio signals, in a variety of languages. These types of audio signals may be found in many military and civilian contexts, such as air traffic control, emergency and ship radio communications, and call-in segments of talk shows.[5]

The technology will potentially be used for analysis of both speech in public settings and private communications. According to SRI International "The software that SRI and its partners are developing will be beneficial for defense-related operations that need to gather information and intelligence, such as speech recognition or voice-based speaker verification from a cell phone on a noisy street corner."[6]

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[2] DARPA, Robust Automatic Transcription of Speech (RATS),
http://www.darpa.mil/Our_Work/I2O/Programs/Robust_Automatic_Transcription_of_Speech_(RATS).aspx
[3] Id.
[4] SRI International, DARPA Awards Contract to Develop Robust Speech Processing Software for Noisy Environments, http://www.sri.com/newsroom/press-releases/darpa-awards-contract-develop-robust-speech-processing-software-noisy-enviro
[5] Id.
[6] Id.

On August 6, 2014, DARPA published a Notice of Intent to Award Sole Source Contract for Phases 4 and 5 of the RATS program.[7] The notice states "The research under this program, originally solicited under DARPA-BAA-10-34, focuses on the development of algorithms for Speech Activity Detection (SAD), Speaker Identification (SID), Language Identification (SID), and Key Word Spotting (KWS) in field collected signals. Meeting this objective requires algorithms capable of coping with degraded and noisy signals where speech is often barely audible."[8]

According to the Notice of Intent, the contractors had collected not only laboratory data, but field data, as well – "[d]uring Phases 2 and 3, field signals were collected and annotated." In Phases 4 and 5, "the objective is to investigate new techniques for adaptation of the algorithms so that they perform well on new, unseen signals not previously available for training, continue to monitor the effectiveness of the adaptation through frequent evaluations, and collect and annotate more field data for the adaptation and evaluation purposes. A second objective is to harden the software so that it is ready for transition and work with transition partners to insert the algorithms into the partners' platforms."[9]

Documents Requested

1. All contracts, statements of work, and technical specifications related to the "Robust Automatic Transcription of Speech (RATS)" program, including but not limited to contracts, statements of work, and technical specifications related to DARPA-SN-14-55 and DARPA-BAA-10-34;
2. All guidelines related to the collection and use of "field signals" as described in Solicitation Number DARPA-SN-14-55.

Request for Expedited Processing

This request warrants expedited processing because it is made by "a person primarily engaged in disseminating information ..." and it pertains to a matter about which there is an "urgency to inform the public about an actual or alleged federal government activity."[10]

EPIC is "primarily engaged in disseminating information."[11]

There is an urgent need for the public to learn about the development of voice recognition software, particularly in light of recent revelations that about the National

[7] Fed Biz Opps, Notice of Intent to Award Sole Source Contract: Phase 4 and 5 of the Robust Automatic Transcription of Speech (RATS) Program, Aug. 6, 2014, available at:
https://www.fbo.gov/index?s=opportunity&mode=form&id=0dcccbb1061b1b09e83e7ce079a64947&tab=core&_cview=0
[8] Id.
[9] Id.
[10] 5 U.S.C. § 552(a)(6)(E)(v)(II) (2008); Al-Fayed v. CIA, 254 F.3d 300, 306 (D.C. Cir. 2001).
[11] American Civil Liberties Union v. Department of Justice, 321 F. Supp. 2d 24, 29 n.5 (D.D.C. 2004).

Security Agency's (NSA) phone call collection. In particular, the NSA's reported ability to collect the content of millions of phone calls paired with voice recognition technology, would create an immensely powerful surveillance apparatus.[12] The fact that this technology could be implemented covertly amplifies the need for the public to have access to information about its capabilities.

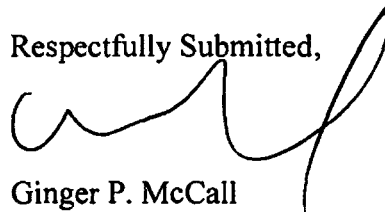Request for "News Media" Fee Status and Fee Waiver

EPIC is a "representative of the news media" for fee purposes.[13] Based on our status as a "news media" requester, we are entitled to receive the requested record with only duplication fees assessed.

Further, because disclosure of this information will "contribute significantly to public understanding of the operations or activities of the government," any duplication fees should be waived. The disclosure of these contracts and related documents will allow the public to understand the activities of DARPA and how tax dollars are being spent. It would also give the public information necessary to have educated conversations about the pros and cons of this technology and how it ought to be deployed.

Conclusion

Thank you for your consideration of this request. As provided in 5 U.S.C. §552(6)(e)(2), I will anticipate your determination on our request for expedited processing within 10 business days. For questions regarding this request I can be contacted at 202-483-1140 ext. 111 or FOIA@epic.org.

Respectfully Submitted,

Ginger P. McCall
Director, EPIC Open Government Project

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[12] Barton Gellman, *NSA Surveillance Program Reaches 'Into the Past' to Retrieve, Reply Phone Calls*, Washington Post, March 18, 2014, http://www.washingtonpost.com/world/national-security/nsa-surveillance-program-reaches-into-the-past-to-retrieve-replay-phone-calls/2014/03/18/226d2646-ade9-11e3-a49e-76adc9210f19_story.html
[13] *EPIC v. Department of Defense*, 241 F. Supp. 2d 5 (D.D.C. 2003).